

# Notice of Allowability

Application No.

09/995,465

Examiner

Tung T. Vo

Applicant(s)

HANAMURA ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-25, 32-56, 63-87 (which were renumbered as 1-75, respectively).
3. ☒ The drawings filed on 27 November 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-25, 32-56, 63-87 allowed. Which were renumbered as 1-75, respectively.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest a coded signal separating and merging system comprising: a coded signal separating apparatus for inputting a first coded moving picture sequence signal to separate into a second coded moving picture sequence signal and a differential coded moving picture sequence signal;

and a coded signal merging apparatus for inputting said second coded moving picture sequence signal and said differential coded moving picture sequence signal to reconstruct said first coded moving picture sequence signal, said coded signal separating apparatus including: inputting means for inputting said first coded moving picture sequence signal therethrough, said first coded moving picture sequence signal generated as a result of encoding original moving picture sequence signal and consisting of a series of first picture information having first coefficient information, said first coefficient information including a matrix of first coefficients;

coded signal converting means for converting said first coded moving picture sequence signal inputted through said inputting means to generate said second coded moving picture sequence signal, said second coded moving picture sequence signal consisting of a series of second picture information having second coefficient information, said second coefficient information including a matrix of second coefficients, each of said first coded moving picture sequence signal, and said second coded moving picture sequence signal is in the form of a

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hierarchical structure including one or more sequence layers each having a plurality of screens sharing common information, one or more picture layers each having a plurality of slices sharing common information with respect to one of said screens, one or more slice layers each having a plurality of macroblocks with respect to one of said slices, one or more macroblock layers each having a plurality of blocks with respect to one of said macroblocks, and one or more block layers each having block information with respect to one of said blocks;

differential coded signal generating means for inputting said first coded moving picture sequence signal and said second coded moving picture sequence signal from said coded signal converting means to generate a differential coded moving picture sequence signal on the basis of said first coefficient information obtained from said series of first picture information of said first coded moving picture sequence signal, and said second coefficient information obtained from said series of said second picture information of said second coded moving picture sequence signal, said differential coded moving picture sequence signal being a difference between said first coded moving picture sequence signal and said second coded moving picture sequence signal;

separating storage means for selectively storing said first coded moving picture sequence signal, said second coded moving picture sequence signal, and said differential coded moving picture sequence signal; and first transmission means for selectively transmitting said first coded moving picture sequence signal, said second coded moving picture sequence signal, and said differential coded moving picture sequence signal to said coded signal merging apparatus; said coded signal merging apparatus including: first receiving means for receiving a base coded moving picture sequence signal transmitted by said first transmission means from said coded

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signal separating apparatus, said base coded moving picture sequence signal being any one of said first coded moving picture sequence signal, said second coded moving picture sequence signal, and said differential coded moving picture sequence signal; merging storage means for storing coded moving picture sequence signal including said base coded moving picture sequence signal received by said first receiving means; request signal determining means for determining a request signal for a requested coded moving picture sequence signal on the basis of said base coded moving picture sequence signal stored by said merging storage means; and request signal transmission means for transmitting said request signal for said requested coded moving picture sequence signal determined by said request signal determining means to said coded signal separating apparatus; whereby said coded signal separating apparatus further includes: request signal receiving means for receiving said request signal transmitted by said request signal transmission means from said coded signal merging apparatus; separating coded signal extracting means for extracting said requested coded moving picture sequence signal from said separating storage means in response to said request signal; and second transmission means for transmitting said requested coded moving picture sequence signal extracted by said separating coded signal extracting means to said coded signal merging apparatus; said coded signal merging apparatus includes: second receiving means for receiving said requested coded moving picture sequence signal transmitted by said second transmission means from said coded signal separating apparatus; merging coded signal extracting means for extracting said base coded moving picture sequence signal from said merging storage means; merging means for merging said base coded moving picture sequence signal extracted by said merging coded signal extracting means with said requested coded moving picture sequence signal received by said

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second receiving means on the basis of said second coefficient information obtained from said series of second picture information of said second coded moving picture sequence signal, and said differential coefficient information obtained from said differential coded signal to reconstruct said first coded moving picture sequence signal; and outputting means for inputting said reconstructed first coded moving picture sequence signal from said merging means to be outputted therethrough.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**TUNG T. VO**  
**PATENT EXAMINER**

T.Vo.

Tung T. Vo  
Primary Examiner  
Art Unit 2613